

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

| s: | COMMISSIONER FOR PATENTS        |
|----|---------------------------------|
|    | P.O. Box 1450                   |
|    | Alexandria, Virginia 22313-1450 |
|    | WWW Hento gov                   |

| APPLICATION NO.          | FILING DATE                      | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|--------------------------|----------------------------------|-------------------------|---------------------|------------------|--|
| 09/905,463               | 07/13/2001                       | Stefano Faccin          | 975.358US01         | 4383             |  |
| 32294                    | 7590 03/22/2005                  |                         | EXAMINER            |                  |  |
| • •                      | SQUIRE, SANDERS & DEMPSEY L.L.P. |                         |                     | TRAN, TONGOC     |  |
| 14TH FLOOI<br>8000 TOWER | RS CRESCENT                      |                         | ART UNIT            | PAPER NUMBER     |  |
| TYSONS CO                | TYSONS CORNER, VA 22182          |                         |                     |                  |  |
|                          |                                  | DATE MAIL ED. 02/22/200 | =                   |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.  | Applicant(s)  |  |  |  |  |
|---|--|---------------|--|--|--|--|
|   | 09/905,463   | FACCIN ET AL. |  |  |  |  |
| Office Action Summary   | Examiner   | Art Unit      |  |  |  |  |
|   | Tongoc Tran  | 2134          |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |  |               |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |  |               |  |  |  |  |
| Status  |  |               |  |  |  |  |
| 1) Responsive to communication(s) filed on 13 Ju  | 1)⊠ Responsive to communication(s) filed on 13 July 2001.                              |               |  |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b) ⊠ This  | action is non-final.   |               |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |  |               |  |  |  |  |
| Disposition of Claims   |  |               |  |  |  |  |
| <ul> <li>4)  Claim(s) 1-52 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-40 and 42-52 is/are rejected.</li> <li>7)  Claim(s) 41 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>   |  |               |  |  |  |  |
| Application Papers  |  |               |  |  |  |  |
| 9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |  |               |  |  |  |  |
| Priority under 35 U.S.C. § 119  |  |               |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>   |  |               |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 1/12/2004.  | 4)  Interview Summary<br>Paper No(s)/Mail Da<br>5)  Notice of Informal P<br>6)  Other: |               |  |  |  |  |

Art Unit: 2134

#### **DETAILED ACTION**

1. This office action is in response to Applicant's application serial no. 09/905,463 filed on 7/13/2001. Claims 1-52 are pending.

## Claim Objections

2. Claims 16 is objected to because of the following informalities:

Claims 16 and 17 are dependent to each other. It appears that Applicant intends to have claim 16 dependent on claim 15.

Claims 44 and 45 are network system claims depending on network element claims.

Claim 44 is missing and two different claims identified as claim 52.

Appropriate correction is required.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-40 and 42-52 are rejected under 35 U.S.C. 102(a) as being anticipated by Handley et al., hereinafter Handley, ("Network Working Group", March 1999).

In respect to claim 1, Handley discloses a method of performing authentication of a subscriber during a subscriber equipment terminated call, comprising the steps of

Art Unit: 2134

sending a session invitation message (S4, S5) to the subscriber equipment, the session invitation message including authentication information (AuthData1), and performing an authentication procedure in the subscriber equipment by using the authentication information (e.g. page 6, (1.1) overview of SIP functionality, page 24, (3) SIP, message overview, page 25-26, (4.1) request-Line, request-header, response-header, page 28, (4.2.1) Invite-4.2.2. ACK, page 41, (6.1) General Header Fields, page 42, (6.3), Request Header Fields (6.4) Response Header Fields, page 44, (6.11) Authorization, page 59-61, (6.26) Proxy Authenticate, (6.27) Proxy-Authorization (6.28) Proxy-Require, page 74, (6.42) WWW-Authenticate, page 108-109, Message Integrity and Access Control: Authentication).

In respect to claim 2, Handley discloses the method according to claim 1, further comprising the step of sending a response message (S6) as a response to the session invitation message from the subscriber equipment to the network, the response message including a result (AuthData2) of the authentication procedure (e.g. pages 42-44 and 59-61).

In respect to claim 3, Handley discloses the method according to claim 2, further comprising the step of verifying (S8; S7b; S8c) the authentication procedure result (AuthData2) in a network control element (e.g. pages 42-44 and 59-61).

In respect to claim 4, Handley discloses the method according to claim 3, further comprising the step of forwarding (S9) the response message of the subscriber equipment to an originating entity initiating the session invitation without the result of the authentication procedure in case of a positive verification (SE; S7b, S8c) (e.g. pages

Application/Control Number: 09/905,463

Art Unit: 2134

page 25-26, 41-page 61 and 108-109).

In respect to claim 5, Handley discloses the method according to claim 3, further comprising the step of forwarding a failure message to an originating entity initiating the session invitation in case of a negative verification (S8; S7b; S8c) (e.g. pages 25-26, 41-61 and 108-109).

In respect to claim 6, Handley discloses the method according to claim 1, wherein in the network the SIP (Session Initiation Protocol) protocol is adopted as a control protocol (e.g. pages 25-26 and 41-61).

In respect to claim 7, Handley discloses the method according to claim 6, wherein the session invitation message is a SIP INVITE request including an authentication header field (e.g. pages 25-26 and 41-61).

In respect to claim 8, Handley discloses the method according to claim 6, wherein the response message is a SIP response message including an authorization header field (e.g. page 25-page 26).

In respect to claim 9, Handley the method according to claim 3, wherein the verifying step (S8) is performed in a network control element which serves as an originating entity initiating the session invitation (e.g. pages 25-26 and 41-61).

In respect to claim 10, Handley discloses the method according to claim 3, wherein the verifying step (S7a) is performed in a network control element which serves the subscriber equipment (e.g. pages 25-26 and 41-61).

In respect to claim 11, Handley discloses the method according to claim 3, wherein the verifying step (S8) is performed in an authentication center (e.g. pages 25-

Art Unit: 2134

26 and 41-61).

In respect to claim 12, Handley discloses the method according to claim 1, further comprising the step of sending a response message (S6a) as a response to the session invitation message from the subscriber equipment to the network, the response message including a result (AuthData2) of the authentication procedure and network authentication information (AuthData3) which is used by the subscriber equipment to perform an authentication of the network (e.g. pages 25-26, 41-61 and page 112-116).

In respect to claim 13, Handley discloses the method according to claim 12, further comprising the steps of determining (S11) a network authentication result (AuthData4) in response to the network authentication information (AuthData4) by the network, sending (S12) the network authentication result (AuthData4) to the subscriber equipment, and verifying (S13) the network authentication result (AuthData4) in the subscriber equipment e.g. pages 25-26, 41-61 and pages 112-116).

In respect to claim 14, Handley discloses the method according to claim 3, wherein the authentication procedure performing step and the verification step (S8; S7b; S8c) are repeated a predetermined number of times, wherein different authentication information (AuthData1) are used (e.g. page 115).

In response to claims 15-28, Handley discloses the claim limitations are network system claims that are substantially similar to method claims 1-14. Therefore, claims 15-28 are rejected based on the similar rationale.

Application/Control Number: 09/905,463 Page 6

Art Unit: 2134

In response to claims 29-39 and 43-45, Handley discloses the claim limitations are substantially similar to method claims 1-14. Therefore, claims 29-39 and 43-45 are rejected based on the similar rationale.

In respect to claim 40, Handley discloses the network according to claim 39, wherein the network control element is adapted to, in case the network control element does not have to perform the verification, forward a scheduled result (AuthResp) to a second network control element by including the scheduled result into the session invitation message (e.g. pages 41-61).

In response to claims 46-52, the claim limitations are substantially similar to claims 1, 2, 6-8 and 12-14. Therefore, claims 46-52 are rejected based on the similar rationale.

#### Allowable Subject Matter

4. Claim 41 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tongoc Tran whose telephone number is (571) 272-3843. The examiner can normally be reached on 8:30-5:00.

Application/Control Number: 09/905,463

Art Unit: 2134

Page 7

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (571) 272-3838. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner: Tongoc Tran

Art Unit: 2134

March 8, 2005

SUPERVISORY DITENT TO A